

**Notice of Allowability**

Application No.

09/429,626

Examiner

Gregory G. Todd

Applicant(s)

EKLUND, CARL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 19 August 2005.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
ARJO ETIENNE

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. This is a second office action in response to applicant's amendment filed, 19 August 2005, of application filed, with the above serial number, on 29 October 1999 in which claims 1, 12, 23, 31, and 32 have been amended by the Applicant. Claims 1-32 are therefore pending in the application.

It is noted Applicant has marked claims 6, 17, 27, 29, and 30 as having been amended, however, no amendments or markings have been found by the Examiner.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

#### **Please amend claim 1 to read:**

A method of initiating compression of an Internet Protocol (IP) header of packets of a stream of packets to be sent from a source apparatus to a destination apparatus in a packet switched network, said source apparatus being connected to said packet switched network by a first node and said destination apparatus being connected to said packet switched network by a second node, said method comprising the steps of:

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modifying, at said first node, the IP header of a first full header packet of the stream of packets from the source apparatus so that a destination address field of the IP header of the first full header packet contains a second node address indicating a location of the second node, the second node address being different than a destination address indicating a location of the destination apparatus;

inserting, at the first node, a routing header in the first full header packet of the stream of packets, said routing header having context identification (CID) information identifying information of the IP header and the destination address indicating the location of the destination apparatus;

transmitting, from the first node to the second node, said first full header packet including the modified IP header and the inserted routing header; and

initiating at the first node, header compression of IP headers of packets of the stream of packets subsequent to the first full header packet, when the second node receives said first full header packet including the modified IP header and the inserted routing header,

wherein IP layer functionality is relied upon to establish a context in which compression is performed.

**Please amend claim 17 to read:**

A method according to claim 1, further comprising:

storing information of the IP header of the first full header packet as a context in corresponding relation to the CID information at the second node when the second

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node receives said first full header packet including the modified IP header and the inserted routing header.

**Please amend claim 12 to read:**

A method of initiating compression of an Internet Protocol (IP) header of packets of a stream of packets to be sent from a source apparatus to a destination apparatus in a packet switched network, said source apparatus being connected to said packet switched network by a first node and said destination apparatus being connected to said packet switched network by a second node, said method comprising the steps of:

modifying, at said first node, the IP header of a first full header packet of the stream of packets from the source apparatus so that a destination address field of the IP header of the first full header packet contains a second node address indicating a location of the second node, the second node address being different than a destination address indicating a location of the destination apparatus;

modifying, at the first node, a routing header in the first full header packet of the stream of packets to include context identification (CID) information identifying information of the IP header and the destination address indicating the location of the destination apparatus;

transmitting, from the first node to the second node, said first full header packet including the modified IP header and the modified routing header; and

initiating at the first node, header compression of IP headers of packets of the stream of packets subsequent to the first full header packet, when the second node

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receives said first full header packet including the modified IP header and the inserted routing header,

wherein IP layer functionality is relied upon to establish a context in which compression is performed.

**Please amend claim 17 to read:**

A method according to claim 12, further comprising:

storing information of the IP header of the first full header packet as a context in corresponding relation to the CID information at the second node when the second node receives said first full header packet including the modified IP header and the modified routing header.

**Please amend claim 23 to read:**

A router for use in a packet switched network for initiating compression of an Internet Protocol (IP) header of packets of a stream of packets from the source apparatus to be sent from a source apparatus to a destination apparatus in the packet switched network, comprising:

first apparatus which modifies the IP header of a first full header packet of the stream of packets so that a destination address field of the IP header contains an address indicating a location of another router,

the address being different than a destination address indicating a location of the destination apparatus;

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second apparatus which inserts a routing header in the first full header packet of the stream of packets, said routing header having Context Identification (CID) information identifying information of the IP header in the destination address indicating the location of said destination apparatus;

third apparatus which transmits to said another router, said first full header packet including the modified IP header and the inserted routing header, header compression of the IP header of each packet of the stream of packets subsequent to the first full header packet being initiated upon receipt in said another router of said first full header packet including the modified IP header and the inserted routing header,

wherein IP layer functionality is relied upon to establish a context in which compression is performed.

**Please amend claim 31 to read:**

A system for initiating compression of an Internet Protocol (IP) header of packets of a stream of packets comprising:

a packet switched network including a source apparatus and a destination apparatus, said source apparatus being connected to said packet switched network by a first node and said destination apparatus being connected to said packet switched network by a second node;

means for modifying at said first node, the IP header of a first full header packet of the stream of packets from the source apparatus so that a destination address field of the IP header of the first full header packet contains a second node address indicating a

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location of the second node, the second node address being different than a destination address indicating a location of the destination apparatus;

means for inserting at the first node, a routing header in the first full header packet of the stream of packets, said routing header having context identification (CID) information identifying information of the IP header and the destination address indicating the location of the destination apparatus;

means for transmitting from the first node to the second node, said first full header packet including the modified IP header and the inserted routing header; and

means for initiating at the first node, header compression of IP headers of packets of the stream of packets subsequent to the first full header packet, when the second node receives said first full header packet including the modified IP header and the inserted routing header,

wherein IP layer functionality is relied upon to establish a context in which compression is performed.

3. The following is an examiner's statement of reasons for allowance: Applicants arguments are persuasive. The prior art of record fails to teach or suggest individually, or in combination, the claimed limitations of at least claims 1, 12, 23, and 31. Takagi et al and Degermark, as well as the prior art of record, do not teach the elements of the claims including inserting or modifying, at the first node, a routing header in the first full header packet of the stream of packets, including context identification (CID) information identifying information of the IP header, as well as initiating at the first node,

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header compression of IP headers of packets of the stream of packets subsequent to the first full header packet, when the second node receives said first full header packet including the modified IP header and the inserted routing header, wherein IP layer functionality is relied upon to establish a context in which compression is performed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd 

Patent Examiner

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